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Choking & Airway Obstruction Difficulties for Individuals with Intellectual and Developmental Disabilities

Developed by:
The Office of Integrated Health - Health Supports Network at the Virginia Department of Behavioral Health and Developmental Services

Training Objectives

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- Define Choking.
- Recognize various different types of choking.
- Identify chronic conditions which increase risk.
- Identify foods known to increase risk of choking.
- Identify types of medications known to increase risk of choking.
- Identify signs and symptoms of someone who may be choking.
- Identify health care professional who is able to assess swallowing.
- Identify behaviors that may increase risk of choking.
- Identify steps which can be taken to prepare for a choking emergency.

What is Choking?

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- Choking can be defined most simply as “an obstructed airway” and may be caused when:
  - A foreign body obstructs the airway.
  - Food and/or a combination of food and drink obstructs the airway.
- Choking can be:
  - Due to an intentional or unintentional act.
  - Partial or complete.
  - Related to age or other chronic neurological and neuromuscular conditions.

What is Choking? Continued…

A choking incident may also be attributed to:

- Dysphagia.
- Certain medications.
- Tardive Dyskinesia.
- Poor dentition (loose, missing, or decaying teeth).
- Poor body positioning while eating.
- Poor meal time behaviors.
- Alcohol consumption.

The risk of choking is multiplied with each additional risk factor (Berzlanovich et al., 2005).

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The Swallowing Process

Stage 1: The oral preparatory phase or buccal phase

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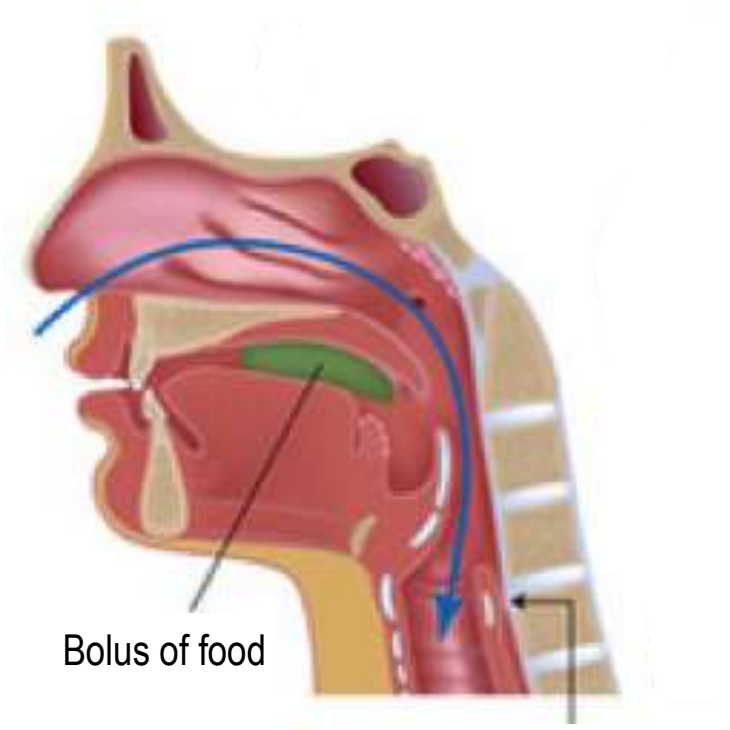
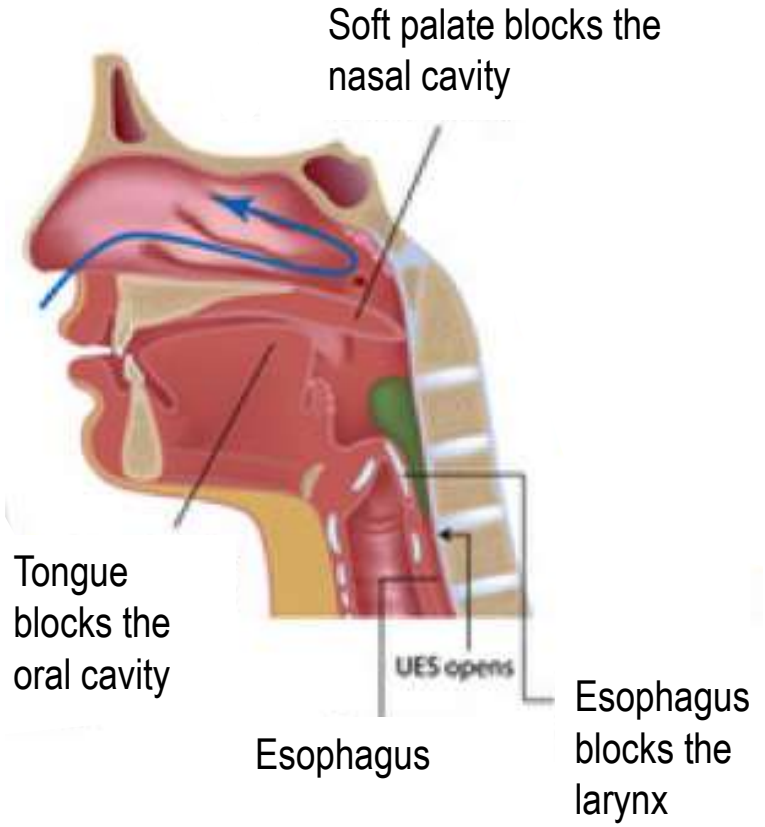
Swallowing happens in three stages.

- The tongue collects the food or liquid.
- Food is chewed and mixed with saliva to form a soft consistency called a bolus.
- The tongue then moves the bolus toward the back of the mouth.
- Individuals with impairment of the oral phase may experience difficulty with creating a lip seal around the fork or spoon, chewing solid consistencies, forming chewed food into a bolus or moving the bolus to the back of the mouth.



Stage 2: The Pharyngeal Phase

- The tongue pushes the bolus of food or liquid to the back of the mouth. This motion triggers a swallowing response which passes the food through the pharynx, or throat.
- During this phase, the vocal cords close to keep food and liquids from entering the airway. The larynx rises inside the neck and the epiglottis moves to cover it, providing even more airway protection.
- If the pharyngeal phase is impaired, food or liquid can move into the throat before the automatic swallow is triggered, resulting in food or liquid touching the vocal folds and or penetrating the vocal folds then moving into the lungs.



Stage 3: The Esophageal Phase

- It begins when food or liquid enters the esophagus, the tube that carries food and liquid to the stomach.
- This phase usually lasts about three seconds, depending on the texture or consistency of the food, but can take slightly longer in some cases, such as when swallowing a pill.
- If the esophageal phase is affected, the patient might experience heartburn, vomiting, burping or abdominal pain.

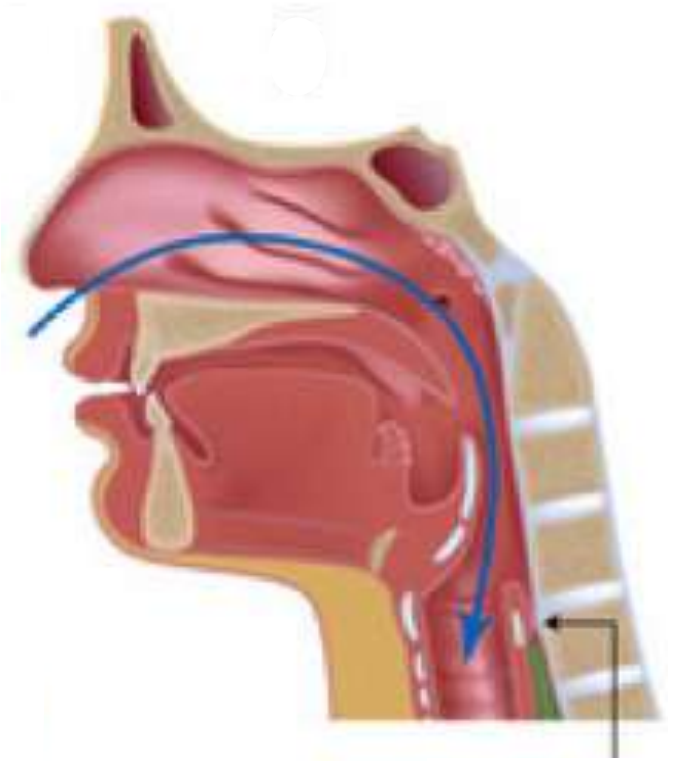
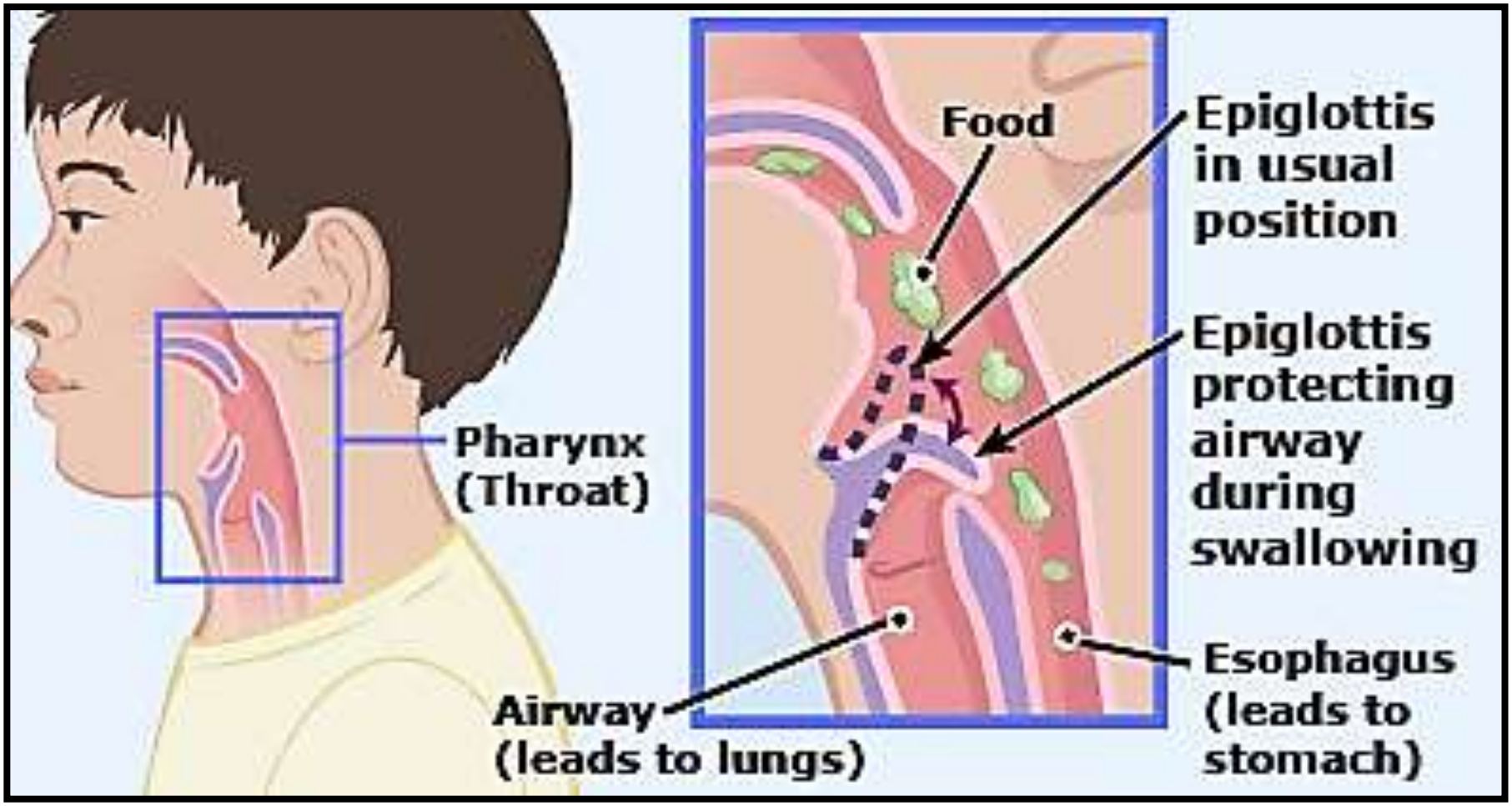
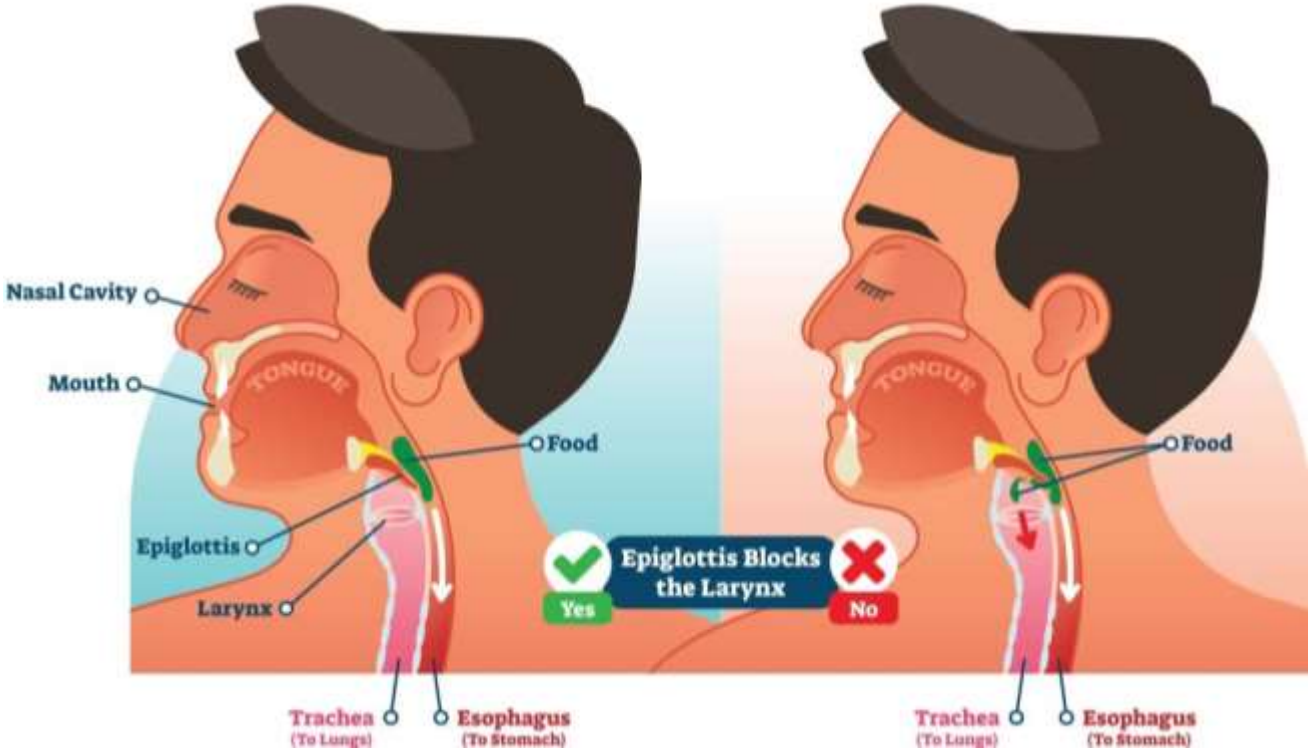


Image of Swallowing



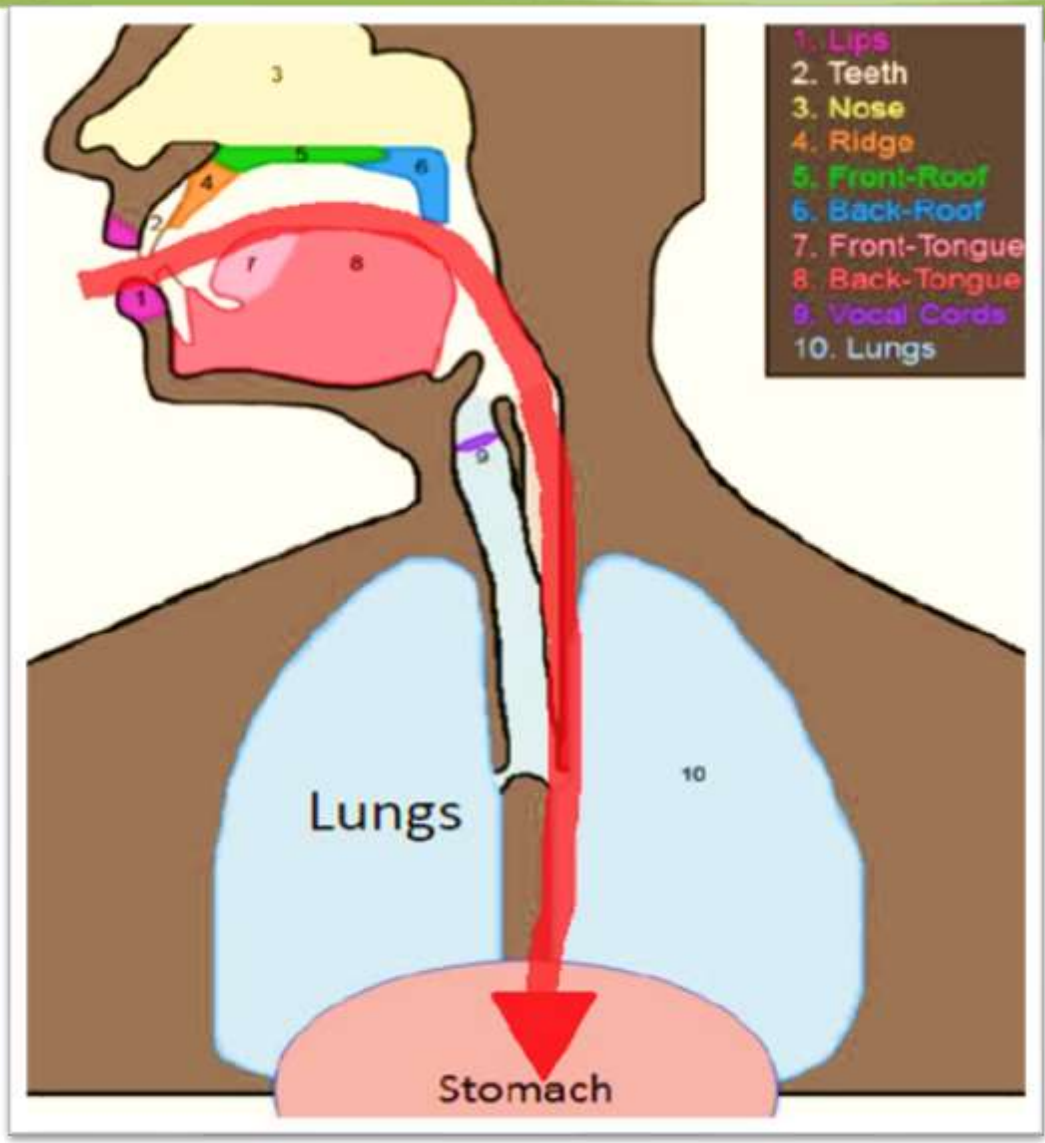
Impaired Swallowing

- Common symptoms include:
  - A choking sensation
  - Shortness of breath
  - Weight loss
  - Coughing before, during or shortly after swallowing
  - Changes in voice quality after swallowing
  - Repeated pneumonia



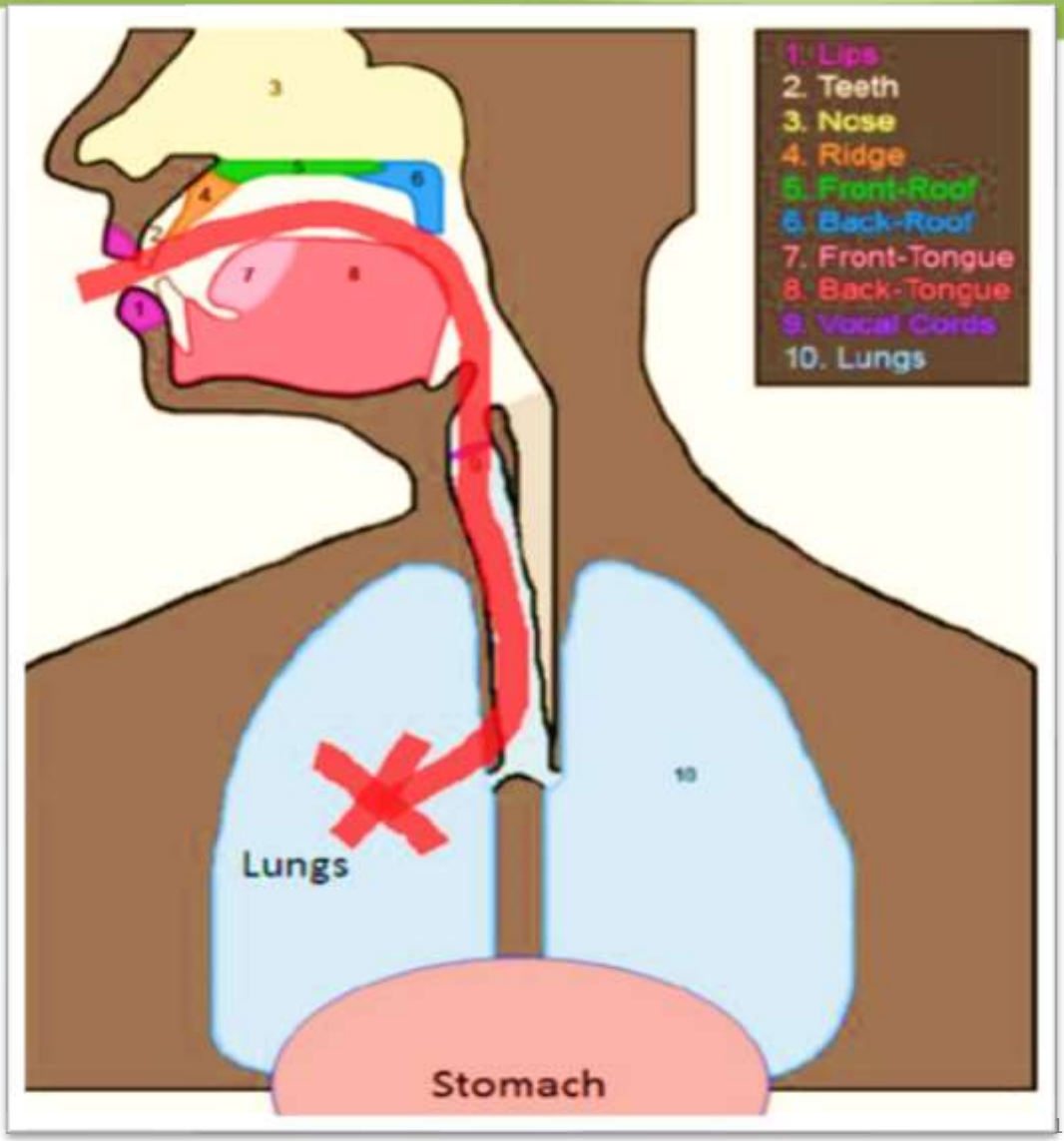
The Correct Food Path

Leads to the stomach, where food is digested.



The Incorrect Food Path

Leads to the lungs, resulting in aspiration pneumonia.



Increased Risk Factors of Choking

Increased Risk Factors

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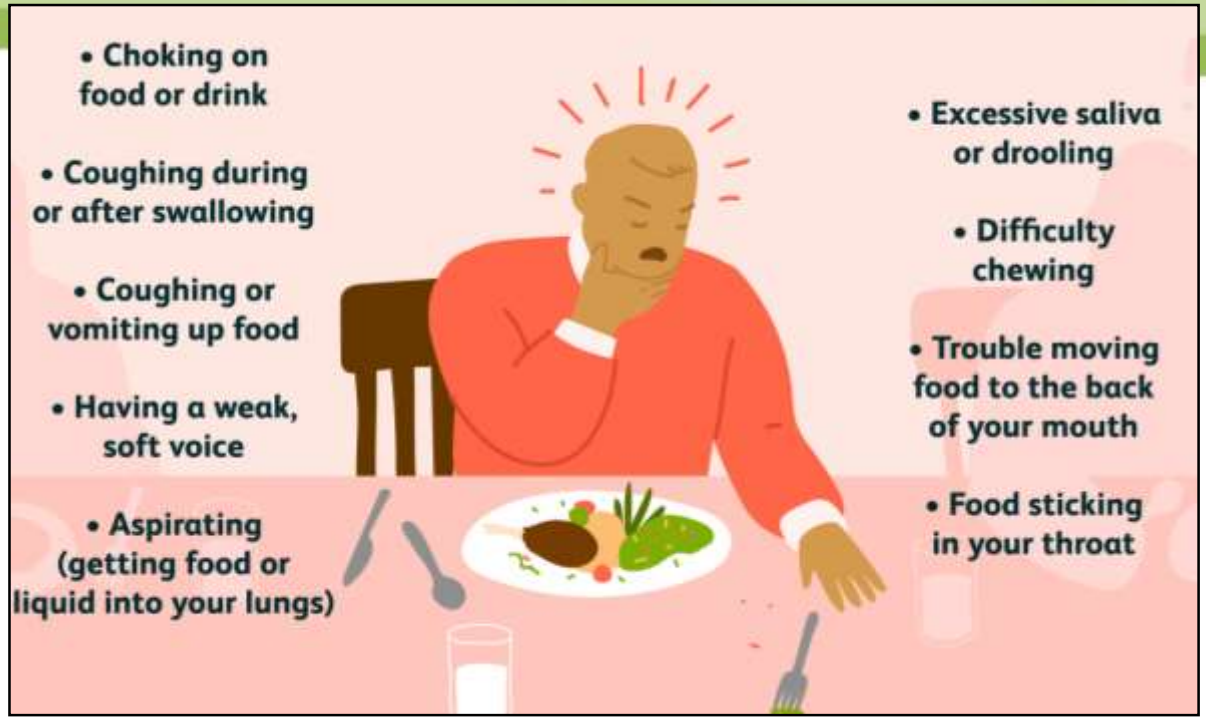
Medical diagnoses which can increase the risk for choking:

- Age: 65+
- Dentures.
- **Dysphagia** (difficulty swallowing).
- **Cleft Palate**.
- Alzheimer's.
- Parkinson's.
- Cerebral Palsy.
- Seizure disorders.
- Muscular disorders.
- Multiple Sclerosis.
- Motor neuron disease.
- Any neurological disorder.
- A history of aspiration pneumonia.
- Amyotrophic lateral sclerosis (ALS).
- **Rumination disorder (RD)**
- Misalignment of the jaw or teeth.
- History of stroke (cerebral hemorrhage).
- Congenital laryngeal web (a rare disorder of the laryngeal area).
- Neoplasm (cancer) in the head, neck or throat area.
- Muscular Dystrophy (a neuromuscular disorder).
- Tardive dyskinesia (a condition caused by long-term use of neuroleptic drugs).
- **Missing teeth** (poor dentition), no teeth (edentulous), loose teeth, or decayed teeth.
- Gastroesophageal reflux disease (GERD) and or a history of GERD.
- **Down syndrome** (a genetic disorder characterized by intellectual disability).
- **Prader Willi syndrome** (a genetic disorder characterized by intellectual disability).
- Thryromegaly (a disorder characterized by an enlarged thyroid gland in the neck).
- Cervical spine injuries (a neuromuscular condition caused by trauma).
- **Individuals with Avoidant Restrictive Food Intake Disorder** (ARFID):
- Polymyositis (an inflammatory disease that causes muscle weakness) (Berzlanovich et al., 2005).

Dysphagia



A diagnoses of dysphagia can mean an individual:

- Has difficultly
- Frequent bouts Pneumonia.
- Difficulty closing lips.
- Has pain when swallowing.
- Extra effort or time to chew and/or swallow.
- Has an abnormal swallowing response.
- Has an unsafe swallow, which poses an increased choking and/or aspiration risk.

(Bryant-Waugh, et al., 2019; Lindvall, et al., 2017; Thomas & Eddy, 2018).

Difficulties with Chewing Can Increase Risk of Choking

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- Chewing (mastication) falls under the SLP assessment area of stage 1 - the oral preparatory stage of swallowing.
- A speech language pathologist can complete an assessment on someone with a chewing disorder.

Mouth (Oral Cavity)

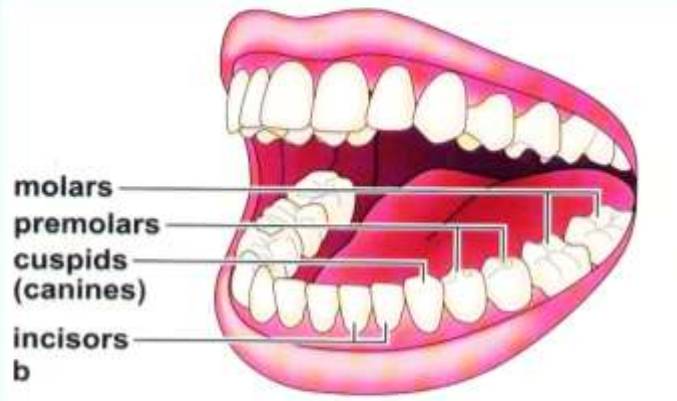
Mechanical Digestion or Mastication (Chewing)

During mastication…

Saliva – softens food

The teeth – grind food

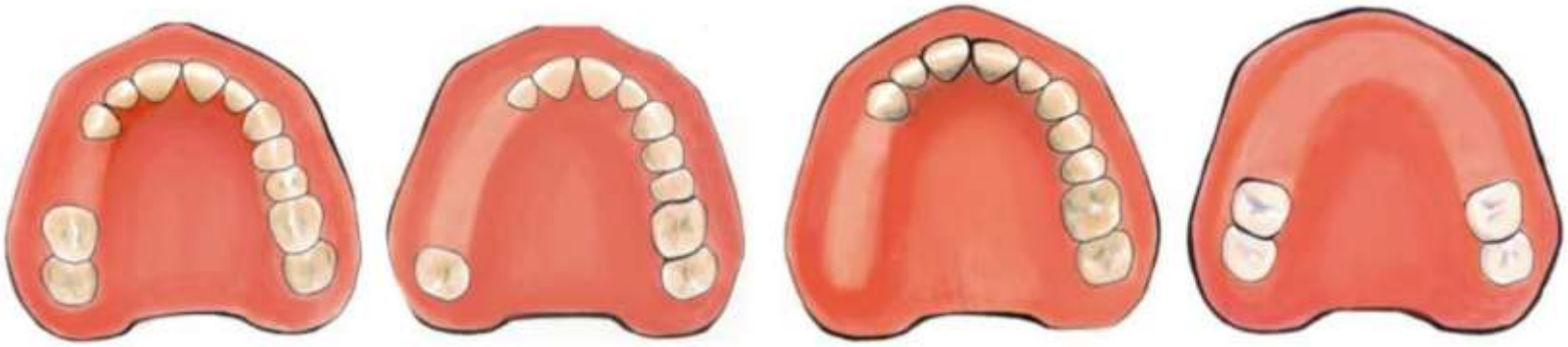
The tongue - manipulates food into a bolus



Oral Health & Choking

- Loss of any teeth reduces masticatory (chewing) performance resulting in a bolus which may be too large to safely swallow.
- Loose, decayed or missing teeth all increase the risk for choking and or airway obstruction.

Less Teeth = Lessened Ability to Grind, Chop, and Process Food



Structural Abnormalities
Cleft Palate

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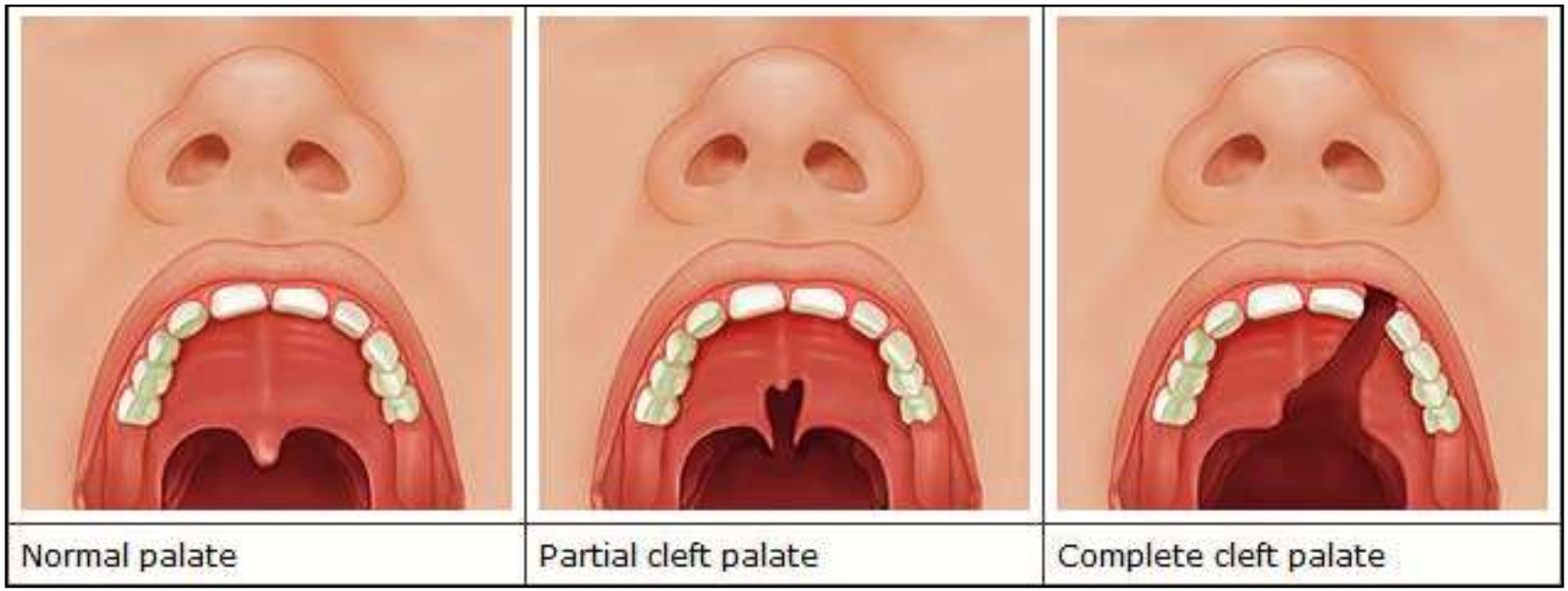
Structural Abnormalities can be Congenital or Acquired and may increase risk of choking.

- Cleft lip and palate are examples of congenital structural abnormality.



Structural Abnormalities
High Palate

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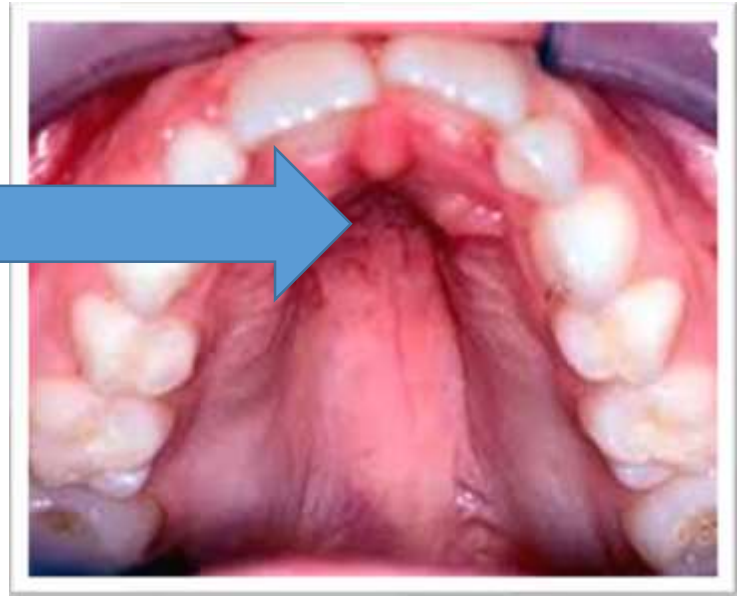
- A high (but closed) palate can also result in an increased choking risk. Why?
- Because food can be trapped in a high palate while eating, but fall down into the mouth when the individual reclines.
- A high arched palate is a symptom of numerous congenital syndromes.

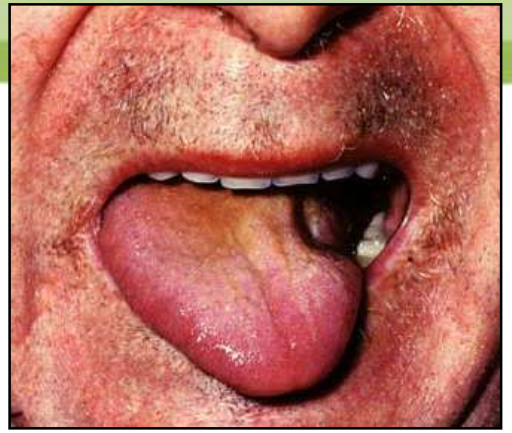


High Palate continued…

Intellectual and developmental disabilities diagnose which could have high palate.

- Pierre Robin
- Goldenhar
- Aspert
- Van derwoude
- Orofacial digital
- Crouzon
- Treacher Collins
- Cleidocranial dysplasia
- Velo-cardio-facial
- Hypoglossia-Hypodactylia
- DiGeorge
- Marfan
- Median cleft face
- Oto-palate digital
- 1st Arch
- Nager
- Patau
- Larsen
- Blepharocheilodontic
- Elashy Water
- Phelan-McDermid
- Fragile X

Functional Abnormalities
Tongue Dysfunction



- Tongue dysfunction results in:
  - Impaired mastication.
  - Impaired bolus formation.
  - Impaired bolus transport.
  - Excessive retention of food in oral cavity.
- Tongue dysfunction increases choking risk because food can become dislodged when the individual reclines and can cause an airway obstruction.
- Tongue dysfunction occurs in numerous congenital syndromes.

Increased Risk Factors continued…

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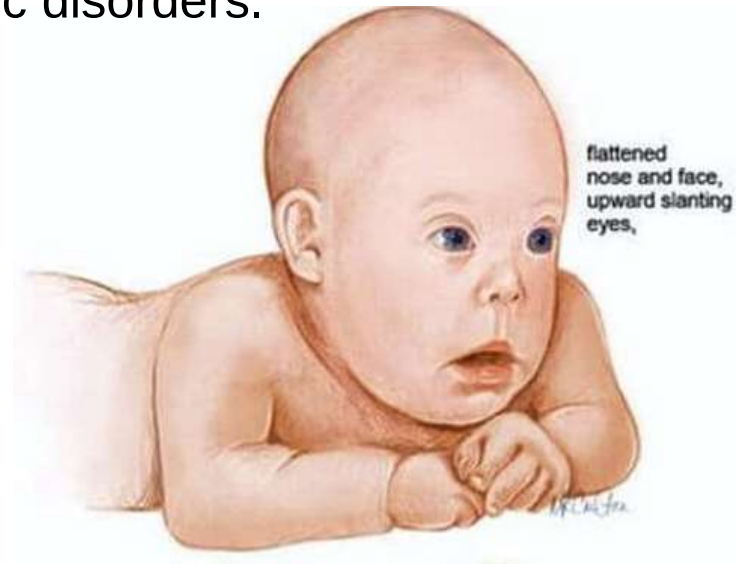
Down Syndrome

- Individuals lack tongue control and frequently have an underdeveloped jaw, leading to impaired chewing, and poor ability to use their tongue thrust to assist during swallowing.
- Are at exceptionally higher risk for choking when compared to other genetic disorders.



(Stevenson et al., 2007; Thacker et al., 2008).

Down Syndrome Feeding Problems

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Table 2. Feeding Problems in Down Syndrome

Cause	Result	Feeding problem
Periodontal disease	Tooth loss	Poor chewing, pain
Reduced saliva	Dry mouth	Poor feeding
Large tongue	Oral food loss	Difficulty swallowing
Small Oral Cavity	Poor chewing	Incomplete chewing of food, choking
Narrow, short palate	Nasal aspiration	Pain; sneezing, choking
Severe bruxism	Dental damage	Pain; poor feeding
Oral hypotonia	Poor suck	Choking; poor feeding
Abnormal tongue movement	Pocketing of food	Retention of food; choking
Poor suck & swallowing	Poor swallowing	Choking; aspiration, emesis

(Van Dyke et al., 1990; Sterling et al., 1992)

Increased Risk Factors continued…

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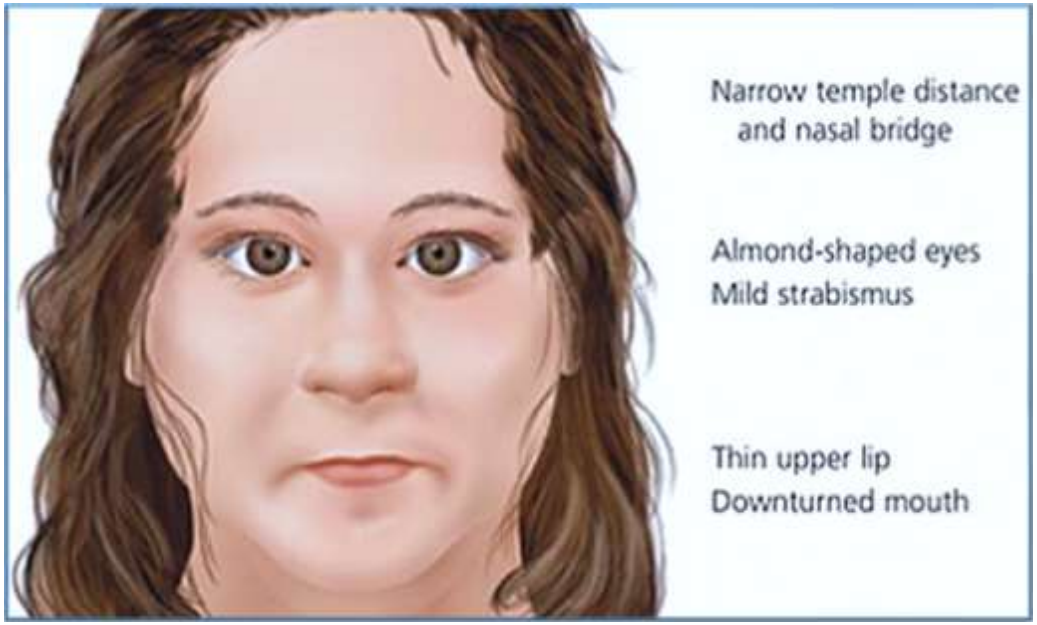
Prader Willi Syndrome

- Increased risk for choking due to poor oral and or motor coordination, poor gag reflex, hypotonia, polyphagia or hyperphagia an abnormally strong sensation of hunger or desire to eat, decreased mastication and voracious eating habits.



(Stevenson et al., 2007; Thacker et al., 2008).

Eating Disorders & Choking

- Individuals with Avoidant Restrictive Food Intake Disorder (ARFID):
  - Lack interest in food or eating.
  - Restrict/avoid food due to the sensory aspects of food or eating (e.g., taste, smell, texture).
  - Develop fear associated with eating, such as choking, and/or vomiting.
- Avoidant and Restrictive Eating Can Result in:
  - Nutritional and energy deficiencies.
  - Significant weight loss and/or failure to gain/maintain weight.
  - Dependence on oral nutritional supplements or enteral feeding.
  - Difficulties with psychosocial functioning.

(APA, 2013; Lindvall, et al., 2017; Thomas & Eddy, 2018; Bryant-Waugh, et al., 2019).

Eating Disorders & Choking continued…

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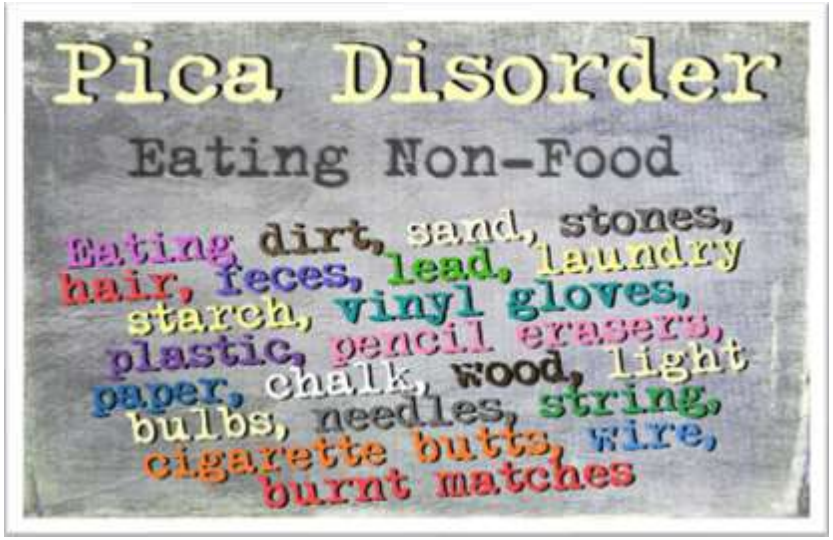
- Pica
  - An abnormal drive or appetite for non food items such as chalk, clay, and laundry detergent.
  - Although rare, some individuals have such severe Pica, they must wear a specially designed helmet with a mouth guard to keep them safe.



Eating Disorders & Choking continued…

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Rumination disorder (RD) is an involuntary regurgitation of food from the stomach into the mouth, where it is re-chewed and re-swallowed.

Causes of Rumination disorder:

- Swallowing air
- Low stomach acid
- Overactive gastrointestinal muscles
- Underactive gastrointestinal muscles

Signs and Symptoms:

- Regurgitation
- Spitting out food
- Malnutrition
- Weight loss
- Gagging
- Tooth decay

Medications which Increase Risk

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Several Medications increase risk for choking. Be aware of medication side effects prior to administration.

- Medications affecting the muscles of the esophagus *may cause dysphagia*. Example: Cogentin (there are many others).
- Medications which cause dry mouth (xerostomia) *interfere with swallowing*. Example: Antihistamines.
- Antipsychotic/Neuroleptic medications for treatment of psychiatric disorders *affect swallowing*, and impact the muscles of the face and tongue. Example: Risperdal
- Central Nervous System (CNS) medications *decrease awareness and voluntary muscle control*. Example: Tegretol.
- High dose steroids and chemotherapeutic (anti-cancer) preparations may *cause muscle wasting or damage to the esophagus.*
- Anti-dopaminergic or anti-cholinergic medications *may increase risk for choking*.

(Lu et al., 2017; Manduchi, et al., 2020).

Eating Behaviors which Increase Risk

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Certain behaviors increase the risk for choking.

- Be educated about any high risk eating habits (stuffing food, isolation, etc.) an individual might have.
- If high risk eating behaviors are observed notify your direct supervisor immediately.
- The individual's PCP should also be notified of high risk eating behaviors.
- A meal time and or eating protocol including, (at a minimum), observations, should be developed.

Isolation Increases Risk of Choking

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- Some individuals feel embarrassment related to their eating.
- They may move away from others and/or want to eat meals alone or in bed.
- *Isolation increases risk for choking*.
- Be alert to those individuals who may choose to leave the dining area, and check on them regularly to ensure they are not in need of assistance.

Eating Behaviors which Increase Risk continued…

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Behaviors which increase the risk of choking:

- Placing too much food or medication in one's mouth.
- Not chewing food well enough prior to swallowing.
- Putting large portions of food in one's mouth.
- Eating too fast.
- Drinking too fast.
- Inattention while eating.
- Swallowing food whole.
- Isolating behaviors.
- Food stealing - resulting in obtaining non-prescribed/inappropriate diet, etc.

Foods Deemed "High-Risk" for Choking

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- Corn.
- Grapes.
- Bananas.
- Hard nuts.
- Marshmallows.
- **Peanut butter (any kind).**
- Chicken on the bone.
- Candy with large nuts.
- Hotdogs served whole.
- Whole, hard fruits like apples or pears.
- **Peanut butter sandwiches on soft bread.**
- Thick chewy bread, e.g. white bread, bagels, pizza, etc.
- Whole, raw vegetables served in large bite-sized pieces.
- Dry meats such as ground beef served without sauce, gravy.
- Dry, crumbly foods such as cornbread or rice served without butter, jelly, sauce, etc.
- Incorrect diet texture - liquids or food items not prepared in accordance with a prescribed diet.
- Eating something with two or more diet textures, especially anything with a thin liquid in addition to a solid component, such as cereal and milk.

(Sidell, et al., 2013).

Nut Butters & Other Sticky Foods

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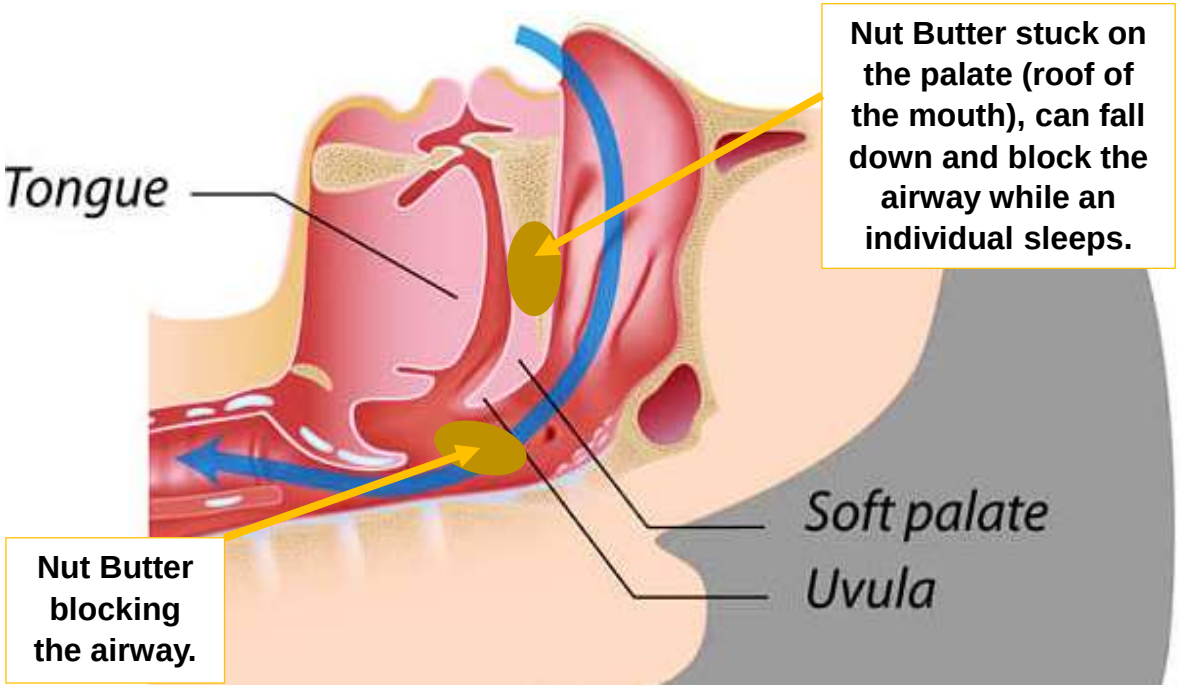
Nut butters present a significant risk of choking, especially for individuals with intellectual and developmental disabilities (IDD) and/or those with dysphagia.

Congenital syndromes associated with IDD can result in both anatomical and neurological precursors for dysphagia, including **Down syndrome Rubinstein-Taybi syndrome** and **Rett syndrome.**



(Shashi and Fryburg, 1995; O'Neill & Richter, 2013; Smith, Teo, & Simpson, 2014; Abraham,Taragin, & Djukic, 2015).

Eating Nut Butters Require Muscle Strength & Coordination

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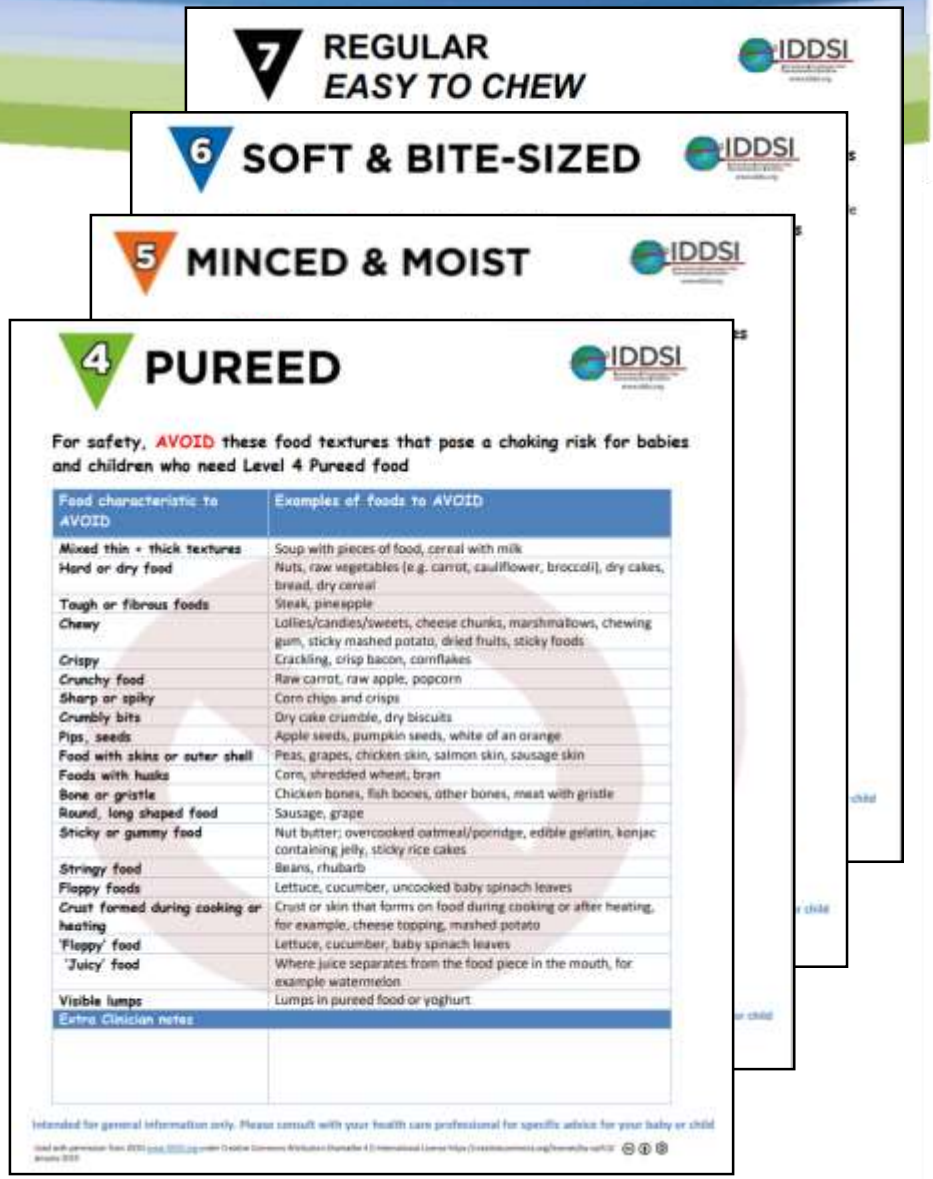
- In a study of nine semi-solid food textures, **peanut butter was the most difficult food to swallow requiring more muscle strength and tongue coordination.**
- Participants reported remnants of food within the oral cavity and a sense of residue coating the oral cavity.
- **Individuals with physician ordered Pureed, Minced & Moist, and Soft & Bite Size diet modifications should avoid eating nut butters, as well as other foods seen on the avoid lists.**

(Parks, Lee, Yoo, & Nam, 2020).

Diet Modifications

- The American Speech Language Hearing Association (ASHA) recently announced they will be using the International Dysphagia Diet Standardization (IDDSI) as the gold standard for texture modified diets.
- **Nut butters, along with other sticky, textured foods, is listed on several of the modified texture levels developed by the IDDSI as a food to avoid.**

To review the IDDSI framework, visit IDDSI patient handouts



(ASHA, n.d.).

Eating Behaviors Which Increase Risk of Choking

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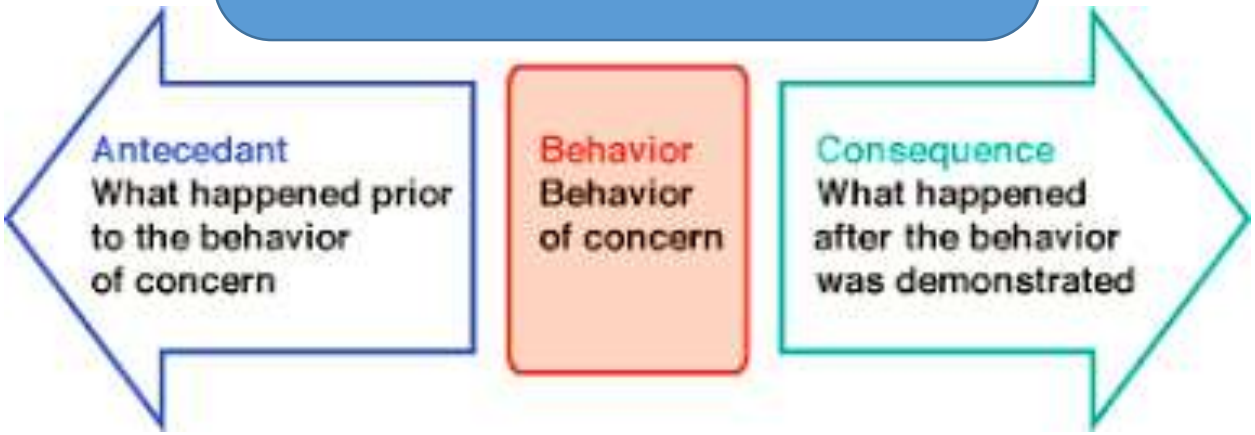
If a choking incident is related to the individual's high risk eating behavior's a referral to a specialist in behaviors, such as a Board Certified Behavior Analyst (BCBA) may be needed. Ask the individual's PCP for a referral and order for a BCBA assessment.

What is a BCBA?

A BCBA is a licensed healthcare professional who studies the behavior of children and adults with experience and training in the development and execution of plans to improve and or change a particular behavior, or behaviors via Applied Behavioral Analysis (ABA).

A BCBA uses positive reinforcement to increase positive behaviors and social interactions, while decreasing inappropriate behaviors.



Healthcare Professionals

Healthcare Professionals

Healthcare professionals who can assess issues with choking and or swallowing are:

- Speech Language Pathologists (SLPs).
- Otolaryngologists (called an Ear, Nose & Throat or ENT).
- Gastroenterologists (they specialize in conditions affecting the entire digestive system).

Where to Get Help

- All those at an increased risk for choking and/or aspiration for any condition mentioned on the previous slides (or any other which puts them at higher risk), should be evaluated by a healthcare professional *as soon as possible*.

- Schedule an appointment with *the individual's primary care physician (PCP) at your earliest convenience* for a referral to the appropriate specialist for an assessment. (Be sure to get a script for the assessment from the individual's PCP.)

- The individual's PCP will know which specialist to best assess the individual's particular condition and or their choking risk.

Speech Language Pathology (SLP) Assessments

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- The SLP will complete a comprehensive review of the individual and their medical/clinical records, and will interview caregivers, parents, or other health care professionals familiar with the individual.

- The SLP will ask some of the following questions about the individual's history before the exam begins:
  - Have you witnessed any previous coughing, choking or gagging episodes while eating?
  - Have you noticed any food sticking in the individual's mouth after eating?
  - Has the individual complained about any difficulty or pain while swallowing? (If so, the frequency, severity, and onset of the difficulty or pain.)
  - Has the individual complained of heartburn or any other GERD-related symptoms?

Speech Language Pathology (SLP) Assessments continued…

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- Will carefully evaluate the individual's teeth, lips, jaws, tongue, cheeks and soft palate.
- Will ask the individual to purse their lips together, stick out their tongue, cough, clear their throat, etc.
- Will check the individual's gag reflex.
- Could also complete *any or all* of the following:
  - A structural assessment of face, jaw, lips, tongue, hard and soft palate, oral pharynx, and oral mucosa.
  - A functional assessment of muscles and structures used in swallowing, including symmetry, sensation, strength, tone, range and rate of motion, and coordination of movement.
  - An observation of head–neck control, posture, oral reflexes, and involuntary movements.

(American Speech, Language, Hearing Association, n.d.; Martin-Harris et al., 2005).

A Swallow Study

- The individual will be given a variety of food and drink substances ranging from water to thicker liquids, pureed foods, soft foods, and regular consistency foods to swallow.
- The SLP will note if the individual has any problems chewing, swallowing or breathing while attempting to swallow, making not of voice sounds “wet”, which might indicate a sign of aspiration or difficulty swallowing.

- The SLP will also be observing for other signs and symptoms of dysphagia such as coughing or clearing of the throat throughout the test, or immediately thereafter.

Types of Swallow Studies

- A video-fluoroscopic swallow study (VFSS), also known as a Modified Barium Swallow, is done by a clinician and a radiologist. A videotaped X-ray records the entire swallowing process. The individual consumes several foods or liquids along with the mineral barium to improve visibility of the digestive tract.
- The Flexible Endoscopic Evaluation of Swallowing with Sensory Testing (FEESST), uses a lighted fiberoptic tube, or endoscope, to view the mouth and throat while examining how the swallowing mechanism responds to such stimuli as a puff of air, food, or liquids. Fiber optic endoscopic evaluation of swallowing (FEES) is sometimes used as an alternative to the MBS.
- Pharyngeal manometry is sometimes used to assess the pressure inside the individual's esophagus.

What does a Swallow Study look like?

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Strategies to Lower Risk

Lowering the Risk of Choking Fatalities

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- ***Everyone*** is at risk for choking.
- Individuals with DD are at higher risk for choking.
- Caregivers should be certificated annually in CPR and the process of administering back blows and abdominal thrusts for choking emergencies.
- Caregiver should do practice drills and or mock emergencies to reinforce emergency protocols.
- Practicing emergency protocols, and allowing direct caregivers the chance to ask questions, builds confidence and improves response technique.
- Repetition of any activity increases muscle memory and gives participants a chance to improve reaction response times.
- Well-placed posters with clear instructions on the steps for caregivers to follow during an emergency can serve as a visual reminders and can help calm caregivers when/if, they begin to panic when an individual is choking.

(Popov & Reder, 2017).

Know, Demonstrate and Teach the Universal Choking Sign

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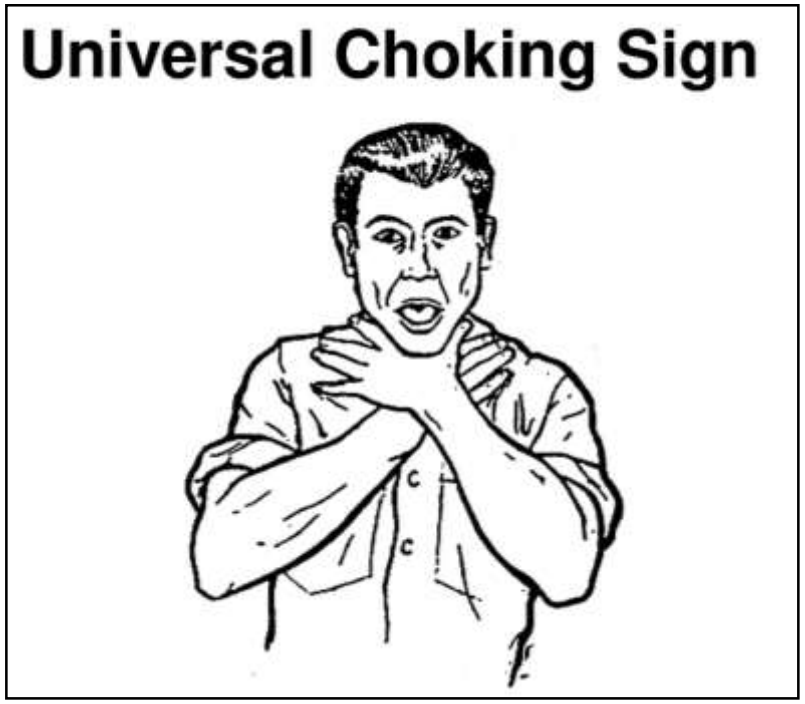
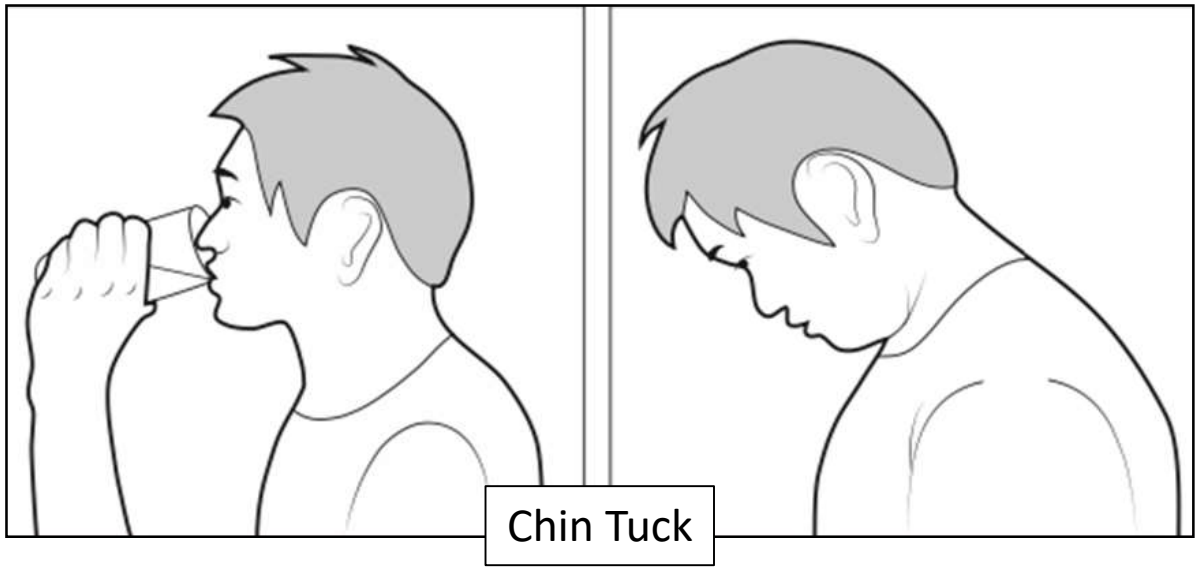
- The universal sign for choking is both hands clutched to the throat.
- Demonstrate the Universal Choking Sign to individuals and teach individuals (who are cognitively and physically able) how to do it themselves.
- Have them demonstrate it to you at routine intervals to make sure they remember how to do it, and when they should use it (i.e. when they are choking).



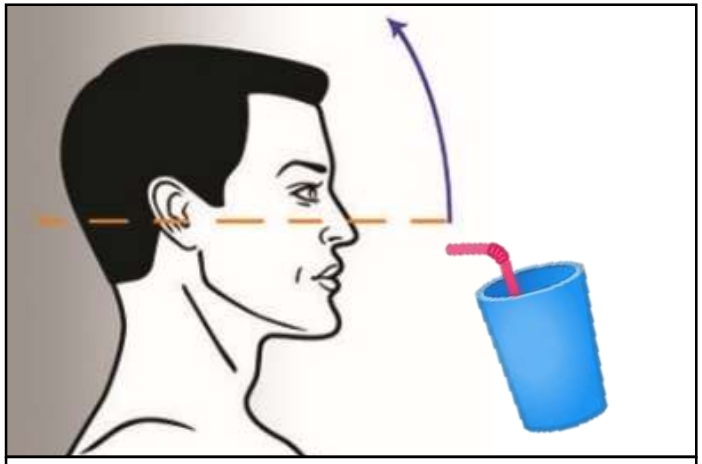
Possible Strategies to Lower Risk

- The results of assessments and testing help the SLP to explore strategies for safer eating or drinking.
- This might include a different head and neck posture, or a neutral head position and or behavioral maneuvers, such as “chin tuck,”.
- The “chin tuck” positioning requires and individual to tuck their chin, so food and other substances do not enter the trachea when swallowing.

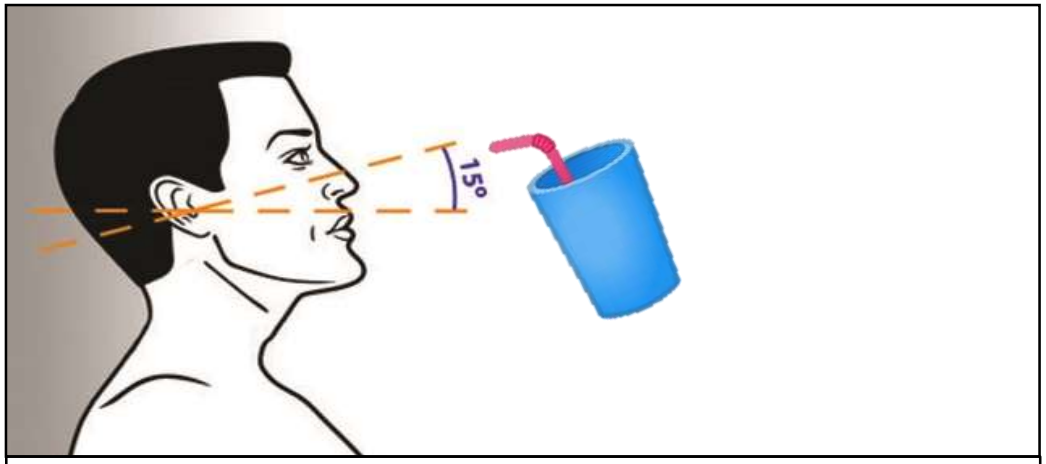


Possible Strategies continued…

- Maintaining a neutral head position allows the airway to remain closed while swallowing. While assisting an individual to drink or eat, hold cups and utensils level with their mouth.
- Holding a cup too high will cause flexion which opens the airway putting an individual at greater risk of choking and aspiration.



Neutral head position



Extended head position (15 degrees of extension)

Possible Strategies may include…

- Avoiding certain foods and beverages.
- The addition of special thickeners to foods and drinks.
- The avoidance of hot or cold foods/beverages which may trigger choking/aspiration incidents.
- Protocols and precautions needed to prevent aspiration, if dysphagia is diagnosed.
- A referral to a dietician or nutritionist.
- PCP orders for diet modification.

Caregiver Protocols can Reduce Risk

Virginia Department of Behavioral Health & Developmental Services

- It is essential to consult the individual's PCP and SLP to ensure a person centered support plan and or choking protocol meets their specific needs. All person centered support plans and or protocols must meet human rights guidelines and require approval with signature from a healthcare professional.
- Examples of possible protocols:
  - Protocols for Pica precautions.
  - Protocols for hands-on, staff-assisted eating.
  - Protocols for direct visual supervision when the individual is consuming food.
  - Protocols for assisted eating or drinking techniques, using adaptive equipment.
  - Protocols for implementing physician orders for prescribed diets and or for thickening foods.
  - Protocols limiting access to food impact an individual's human rights which requires approval from the local human rights counsel (LHRC) prior to implementation.

What Not to Do

- **DO NOT** rush mealtimes.
- **DO NOT** plan other activities during mealtimes.
- **DO NOT** permit eating or drinking while the individual is lying down.
- **DO NOT** give foods or liquids that a particular individual has difficulty swallowing.
- **DO NOT** assist individuals to bed, for at least 30 minutes after eating or drinking.
- **DO NOT** give foods or liquids restricted by an individual's health care provider.
- **DO NOT** start mealtime if the individual is too lethargic, angry, anxious, or if they cannot sit still.
- **DO NOT** let an individual finish eating a particular food item, if that food item has just caused the individual to choke.

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Choking Emergencies

Did you know…

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Some people who choke can still breathe.

Symptoms:

Look of fear or panic.

Reddish face.

Grabbing throat.

Drooling.

Forceful coughing.

Some people who choke can NOT breathe.

Symptoms:

Can not speak.

Grayish or pale face.

Bluish lips.

Grabbing throat.

High-pitched noise or no noise.

Performing Abdominal Thrusts on Someone Else*

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1. **Stand behind the person.**
   - Place one foot slightly in front of the other for balance. Wrap your arms around the waist. Tip the person forward slightly. If a child is choking, kneel down behind the child.
2. **Make a fist with one hand.**
   - Position it slightly above the person's navel.
3. **Grasp the fist with the other hand.**
   - Press hard into the abdomen with a quick, upward thrust — as if trying to lift the person up.
   - Perform between six to ten abdominal thrusts until the blockage is dislodged.

- If you are the only rescuer, perform back blows and abdominal thrusts before calling 911 or your local emergency number for help. If another person is available, have that person call for help while you perform first aid.
- If the person becomes unconscious, perform standard cardiopulmonary resuscitation (CPR) with chest compressions and rescue breaths.

**Please, remember to follow your agency's training for responding to a choking victim. These instructions are not meant to take the place of in-person training.*

Step-By-Step Guide
What to Do In a Choking Emergency*

If an individual does not give the universal choking signal, look for all the signs and symptoms of choking.

- If able to cough forcefully, the person should keep coughing.
- If choking and can't talk, cry or laugh forcefully, the American Red Cross recommends a **"five-and-five"** approach to delivering first aid:
  - **Give five back blows.** Stand to the side and just behind a choking adult. For a child, kneel down behind. Place one arm across the person's chest for support. Bend the person over at the waist so that the upper body is parallel with the ground. Deliver five separate back blows between the person's shoulder blades with the heel of your hand.
  - **Give five abdominal thrusts.** Perform five abdominal thrusts.
  - **Alternate between five blows and five thrusts** until the blockage is dislodged.

Give 5 back blows

Give 5 abdominal thrusts

Please, remember to follow your agency's training for responding to a choking victim. These instructions are not meant to take the place of in-person training.

To Perform Abdominal Thrusts on yourself*

- First, if you are alone and choking, call 911 or your local emergency number immediately. Then, although you will be unable to effectively deliver back blows to yourself, you can still perform abdominal thrusts to dislodge the item.
  1. **Place a fist** slightly above your navel.
  2. **Grasp your fist** with the other hand and bend over a hard surface — a countertop or chair will do.
  3. **Shove your fist** inward and upward.

Please, remember to follow your agency's training for responding to a choking victim. These instructions are not meant to take the place of in-person training.

Aid to Someone Choking in a Wheelchair*

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- Encourage the person to cough, if they can't cough then start assistance immediately.
  1. Lock the brakes on the wheelchair with the brake handle.
  2. Call for assistance from other staff members if available. If you are the only rescuer, perform back blows and abdominal thrusts before calling 911 or your local emergency number for help. *If another person is available, have that person call for help while you perform the steps below.*
  3. Lean the choking wheelchair user forward and slap their back 5 times between their shoulder blades.
  4. If they are still choking, stand directly behind them, lean down and wrap your arms around their waist.
  5. Making a fist, place your other hand on top of your fist. and put it above their belly button.
  6. Pull in and up, as if trying to lift the person up, pulling the individual's body in towards you and up 5 times to perform abdominal thrusts. Repeat up to 5 times.
- If they are still choking alternate 5 back blows with 5 abdominal thrusts, checking after each action to see if obstruction has been removed.

**Please, remember to follow your agency's training for responding to a choking victim. These instructions are not meant to take the place of in-person training.*

To Clear the Airway of an Unconscious Person*

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1. **Lower the person** on his or her back onto the floor, arms to the side.
2. **Clear the airway.**
   - If a blockage is visible at the back of the throat or high in the throat, reach a finger into the mouth and sweep out the cause of the blockage.
   - Do not try a finger sweep if you cannot see the object. Be careful not to push the food or object deeper into the airway, which can happen easily in young children.
3. **Begin CPR** if the object remains lodged and the person does not respond after you take the above measures. The chest compressions used in CPR may dislodge the object. Remember to recheck the mouth periodically.

**Please, remember to follow your agency's training for responding to a choking victim. These instructions are not meant to take the place of in-person training.*

CONSCIOUS CHOKING

Cannot Cough, Speak, Cry or Breathe

After checking the scene for safety and the injured or ill person, have someone CALL 9-1-1 and get consent. For children and infants, get consent from the parent or guardian, if present.

1 GIVE 5 BACK BLOWS

- **Adult:**

- **Child:**

- **Infant:**

2 GIVE 5 ABDOMINAL THRUSTS

- **Adult:**

- **Child:**

- **Infant:** (chest thrusts for infant)

TIP: *For infants, support the head and neck securely. Keep the head lower than the chest.*

3 REPEAT STEPS 1 AND 2 UNTIL THE:

- *Object is forced out.*
- *Person can cough forcefully or breathe.*
- *Person becomes unconscious.*

WHAT TO DO NEXT

- *IF PERSON BECOMES UNCONSCIOUS — Carefully lower the person to the ground and give CARE for unconscious choking, beginning with looking for an object.*
- *Make sure **9-1-1** has been called.*

American Red Cross

Quiz

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1. Choking can be defined simply as airway obstruction.
   a. True b. False
2. Choking can be a partial or complete obstruction of the airway.
   a. True b. False
3. Everyone is at risk of choking, but individuals with DD have an increased risk.
   a. True b. False
4. Medications which cause xerostomia (dry mouth) increase risk of choking.
   a. True b. False
5. Missing teeth decreases the risk of choking.
   a. True b. False
6. An individual who has difficulty with chewing or moving their tongue, they may be at increases risk of choking and should be assessed by a health care professional.
   a. True b. False
7. Structural abnormalities of the mouth and throat do not increase risk of choking.
   a. True b. False
8. PICA is when a person craves non food items such as clay or chalk to eat and or swallow.
   a. True b. False
9. Prader Willi syndrome and Down syndrome are two genetic disorders which increase the risk of choking in an individual diagnosed with DD.
   a. True b. False
10. When a person is choking you should give 5 back blows and 5 abdominal thrusts, call for help, continue until the blockage is cleared and or start CPR if the individual becomes unconscious.
    a. True b. False

Resources

- American Red Cross (2011). First aid conscious choking poster. file:///C:/Users/dha92624/Downloads/first-aid-consciouschokingposter-en.pdf
- American Red Cross (n.d.). How do you care for a conscious choking victim? https://www.youtube.com/watch?v=UVNxP7K2ATE
- American College of Emergency Physicians. Choking (Heimlich maneuver). https://www.emergencyphysicians.org/article/know-when-to-go/choking--heimlich-manuever
- American Academy of Pediatrics. (2011). Choking Prevention and First Aid for Infants and Children https://www.laborposters.org/first-aid/1805-choking-cpr-for-children-or-infants-poster.htm
- American Red Cross (2010). CPR/AED for professional rescuers and health care providers. https://www.redcross.org/content/dam/redcross/atg/PHSS_UX_Content/CPRO_Handbook.pdf
- Resuscitate! CPR AED & Choking App Stone Meadow Development LLC https://apps.apple.com/us/app/resuscitate-cpr-aed-choking/id363393502
- National Safety Council's Emergency Response App It provides a list of abbreviations and memory aids, as well as an illustrated summary of treatment steps for various illnesses and injuries. https://play.google.com/store/apps/details?id=com.nsc.hybrid&hl=en_US
- If you have any questions about the information contained in this Health & Safety Alert, please email your question to the Office of Integrated Health's nursing team at: communitynursing@dbhds.virginia.gov
- What to do when a Wheelchair User is choking: https://www.aid-training.co.uk/news/what-to-do-when-a-wheelchair-user-is-choking
- The ARC handout on Choking an Obesity, Choking in a Wheelchair: https://hrstonline.com/demo/elearning/live/choking/choking-part-2/Choking%20with%20Morbid%20Obesity%20Protocol.pdf
- How to deal with a choking wheelchair user YouTube video: https://www.youtube.com/watch?v=1L1dR9qUN0E

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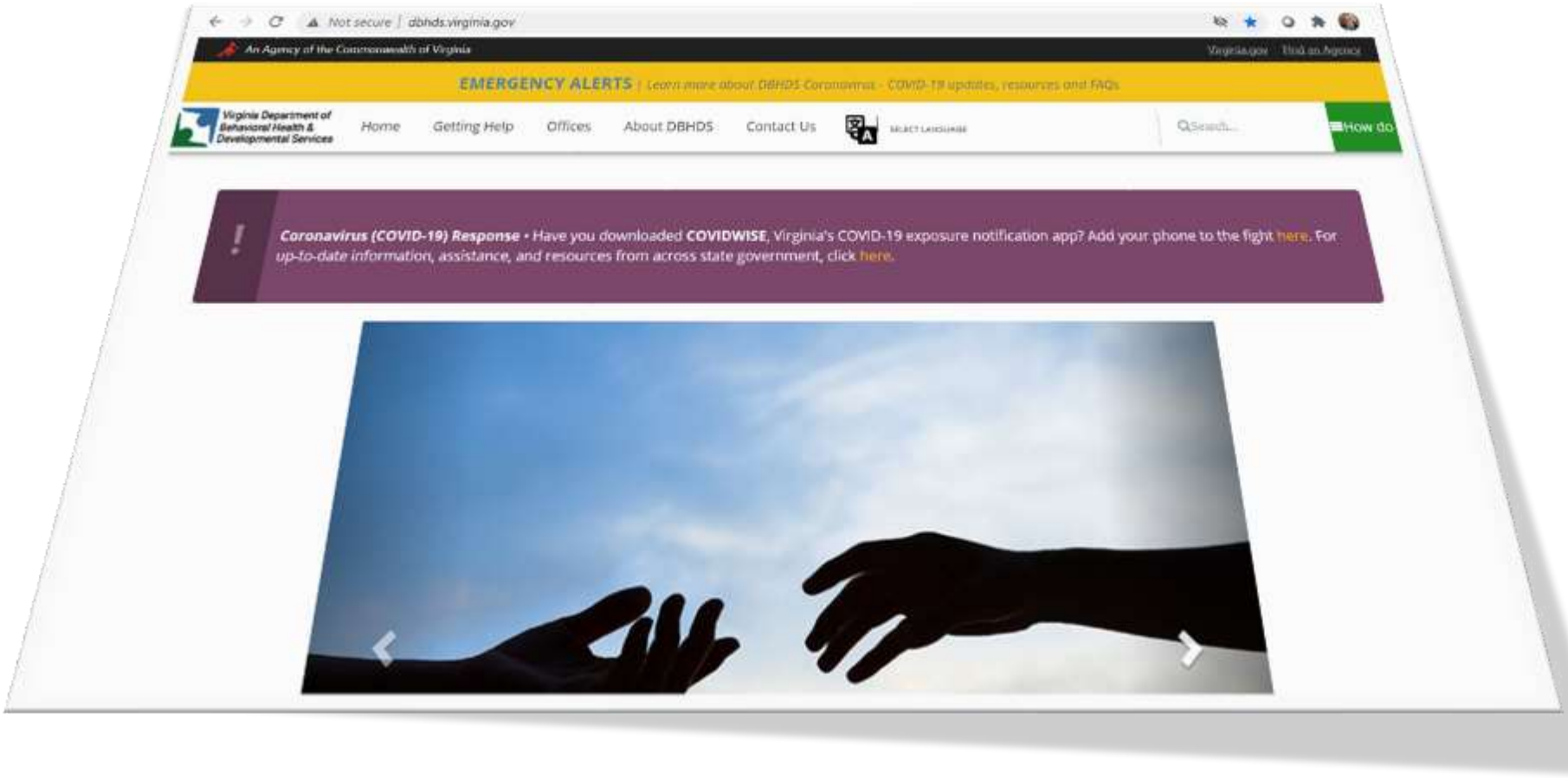
Office of Integrated Health Resources

DBHDS Website

DBHDS Website: http://www.dbhds.virginia.gov/



The Office of Integrated – Health Supports Network on the Web

What We Do…

Mission:

- Supporting a life of possibilities by ensuring quality supports and a pathway to community integrated health services.
- To serve as a resource for information related to healthcare, wellness, healthcare providers, and health-related services within the Commonwealth.

The OIH website: https://dbhds.virginia.gov/office-of-integrated-health#

OIH Mobile Rehab Engineering (MRE) Team

Virginia Department of Behavioral Health & Developmental Services

MRE Team Email Contact: mreteam@dbhds.virginia.gov

OIH Mobile Dental Team

Virginia Department of Behavioral Health & Developmental Services

For more information about the OIH Dental Program and the services provided please contact the OIH Dental Team at dentalteam@dbhds.virginia.gov

OIH Registered Nurse Care Consultants (RNCCs) and Physical Therapist (PT)/ Wound Care Specialist (CWTS)

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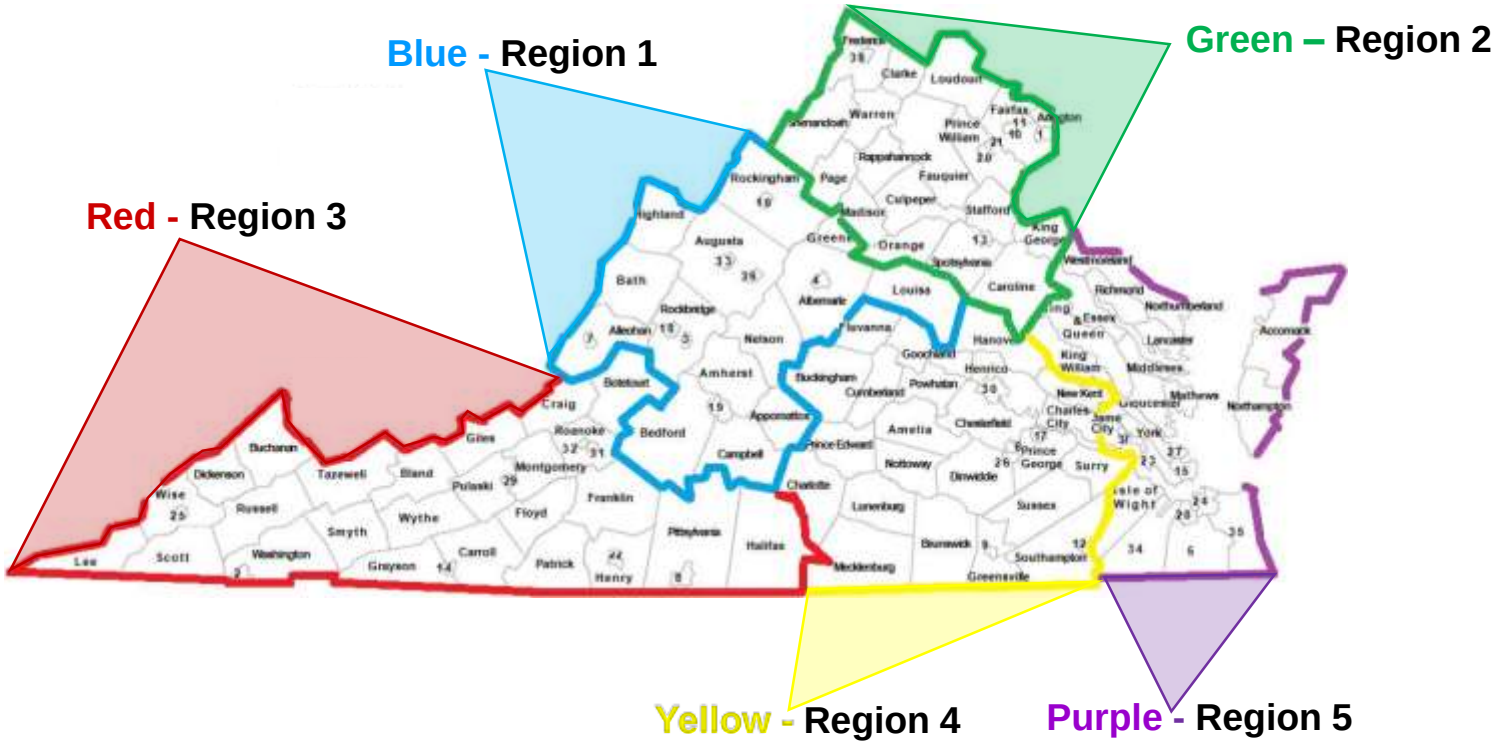
- The RNCCs provide technical assistance for individual's with intellectual and or developmental disabilities related to their health and safety in the community. Community Nursing: communitynursing@dbhds.virginia.gov
- The PT/CWTS/ATP provides consultations with other healthcare professionals, and provides agencies in the community supporting the IDD population.



OIH RNCC Team

The OIH RNCC Team:

- Health Trends Newsletter.
- Monthly Regional Nursing Meetings.
- Health & Safety alerts.

Sign-up to receive all Provider Development emails here: https://tinyurl.com/ProviderNetworkListserv

OIH Training Sessions

Virginia Department of Behavioral Health & Developmental Services

Current Trainings

- Calling 911.
- Choking.
- Falls.
- Fatal 7.
- General Infection Control.
- Guidance for Vaccinating Individuals with Intellectual and Developmental Disabilities.
- MRE, Assistive Technology and Durable Medical Equipment.
- Sepsis.
- Skin Integrity.
- Transfers.
- Urinary Tract Infection.
- Vital Signs.
- Wheelchair Transitioning.

Upcoming Trainings

- Advocacy.
- All About Waivers in Virginia.
- Assistive Technology.
- Aspiration Pneumonia.
- Constipation.
- Dehydration.
- Diabetes.
- Emergency Evacuation Devices.
- Emergency Preparedness.
- Grief and Loss.
- Nutrition.
- Nuts & Bolts (Skilled Nursing).
- Polypharmacy.
- Recognizing Rapidly Declining Health and Medical Emergencies.
- Respiratory Infections.
- What is a Group Home?

Future Trainings

- Angelman syndrome.
- Attention Deficit Disorder.
- Autism Spectrum Disorder.
- Downs syndrome.
- Fragile X.
- Intellectual Disability – What do Acute Care Healthcare Professionals Need to Know?
- Intellectual Disability – What do Community Healthcare Professionals Need to Know?
- Intellectual Disability – What is it? What do caregivers need to know?
- Muscular Dystrophy.
- Phelan McDermid syndrome.
- PICA.
- Turner syndrome.

Still Have Questions?

Please contact:

The Office of Integrated Health (OIH)

Virginia Department of Behavioral Health and Developmental Services (DBHDS)

804-786-0580

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Thank You !